



Driving Blends

Minnesota's transition to ethanol & biodiesel

Fuel Blends Webcast

March 16, 2005

American Lung Association of Minnesota

Outdoor Air Programs – Tim Gerlach

Twin Cities Clean Cities Coalition (TC4)

www.CleanAirChoice.org



clean air choice



AMERICAN LUNG ASSOCIATION™
of Minnesota



An aerial photograph of a multi-lane highway filled with numerous cars and trucks, illustrating the density of motorized vehicles. The vehicles are packed closely together in several lanes, with some appearing to be in motion while others are stationary. The colors of the vehicles vary, including white, silver, red, and blue. The highway has white lane markings and a central divider.

**Motorized vehicles are #1 single
source of air pollution in Minnesota.**

Our Mission:

“Improve Air Quality. Reduce the impact of tailpipe emissions on the environment and human health.”



- Drive Less - Use Less
- Use Cleaner Traditional Fuels
- Use Cleaner Alternative Fuels

MN B2 Requirement

- Requires minimum 8 million gallons of in-state biodiesel production
- Start: ~July 2005
- ~16 mgy in diesel displacement
- Presently, B2, B5, B10, B20 blends in use by fleets
- 100+ rural stations already offer B2



MN E10 Requirement



- “Gasohol” effort in Midwest of 1970s
- Viewed as rural & ag economic development
- Oxygenated fuels requirement
 - 2.7% O₂ met with min. 7.8 vol% ethanol
 - Initially to combat CO in nonattainment areas
 - Expanded to statewide, year-around in 1997
 - Replaces 10% of gasoline needs
 - 97% market penetration (some non-oxy premium)

*MN: 13 plants; ethanol exporter; \$1.3B;
5,300 jobs*

MN Governor Tim Pawlenty:

“I’ve found criticism of good public policy ideas comes in three stages:

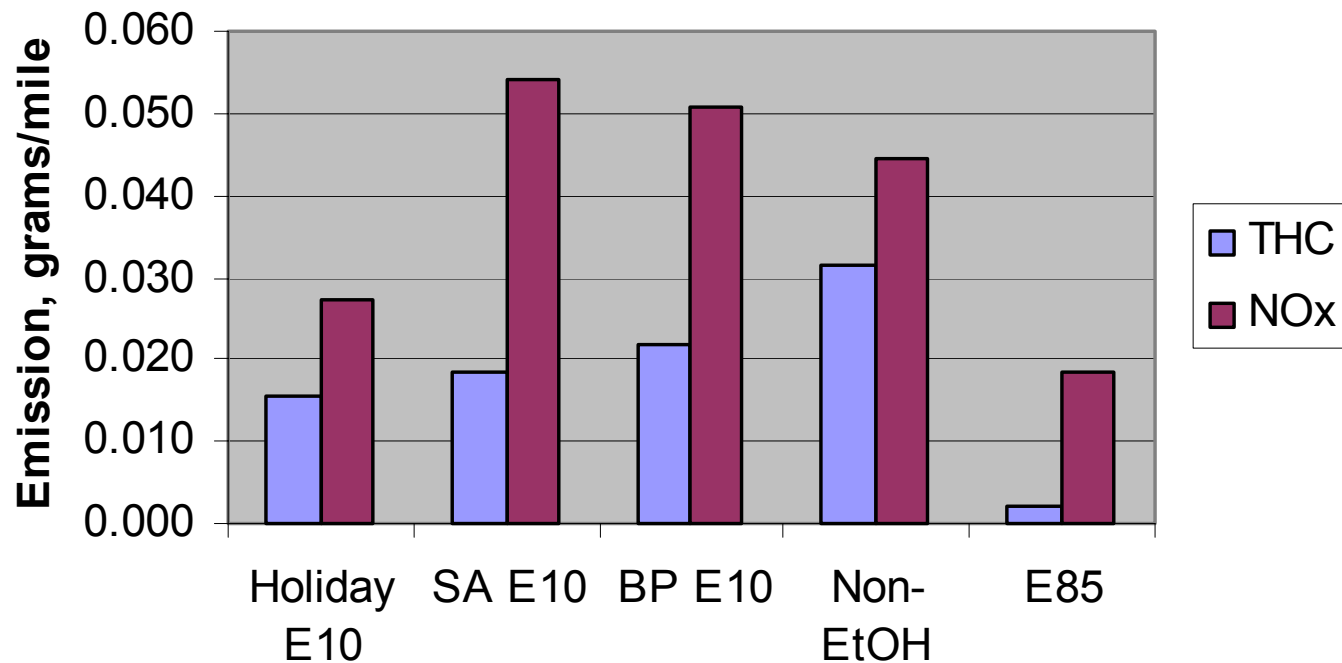
1. It’ll never work;
2. It’ll cost too much; and
3. I thought it was a good idea all along.”

E10 (and now B2) happened in MN because of people and their grassroots efforts . . . And not taking “no” for an answer.

“What we need is a whole lot of people who are not experts in what can't be done.”

- Henry Ford

THC and NOx Tailpipe Emission Comparison



American Lung Association of MN Summer 2004 *Twin Cities Gasoline Survey & Comparison*

Partial EPA federal test procedure [505-sec-duration/hot start; FTP 75 driving cycle]

Test vehicle: 2004 4-L Ford Explorer Sport Trac flexible fuel vehicle

87-octane gasolines and one E85 fuel

Non-ethanol gasoline sampled at BP in Hudson, Wisconsin.

All American Lung Association of Minnesota fuel/vehicle testing has been conducted by the University of North Dakota Energy & Environmental Research Center and the Minnesota State University-Mankato MnCAR program

